What is claimed is:

1.   In an object tracking and control methodology wherein objects to be tracked are dispensed from a central location for use and returned at the central location after use and wherein the objects are stored, dispensed, and returned in a security container bearing a readable identification code, the improvement comprising the steps of:

(a) reading the identification code of a security container upon return of objects therein and identifying the security container based on its identification code;

(b)   extracting information about the object contained within the security container;

(c)   identifying the object in the security container based upon the extracted information and verifying that the object in the security container is the object that is expected to be in the security container based on the extracted information;

(d)   taking appropriate remedial action if the object is determined in step (c) not to be the object that is expected to be in the security container; and

(e)   storing the security container and the object therein at the central location if the object is determined in step (c) to be the object that is expected to be in the security container.

2. The improvement of claim 1 and wherein identification codes on security containers are stored in an RFID tag and wherein step (a) comprises reading the identification code through radio frequency transmission.

3. The improvement of claim 1 and wherein step (b) includes extracting the weight of the security container and its contained object upon return at the central location and wherein step (c) includes comparing the extracted weight to an expected weight of the security container and its contained object.

4. The improvement of claim 3 and wherein step (d) includes taking appropriate remedial action if the weight of the security container and the object therein does not correspond to the expected weight.

5. The improvement of claim 4 and wherein step (e) includes storing the security container and the object therein at the central location if the weight of the security container and the object therein corresponds to the expected weight.

6. The improvement of claim 3 and wherein step (b) further includes the step of taking a digital image of the object in the security container upon return at the central location and extracting information about the object from the digital image,

52

and wherein step (c) includes comparing the extracted information from the digital image to expected information about the object within the security container.

7.   The improvement of claim 6 and wherein the extracted information includes the shape of the object within the container and where in step (c) the extracted shape is compared to an expected shape of the object.

8.   The improvement of claim 6 and wherein the extracted information includes the color of the object within the container and where in step (c) the extracted color is compared to an expected color of the object.

9.   The improvement of claim 6 and wherein more than one object is contained in the container and wherein the extracted information includes the number of objects in the container and wherein step (c) includes comparing the extracted number of objects to the expected number of objects in the container.

10.   The improvement of claim 9 and wherein it is expected that a predetermined number of objects will be removed from the container prior to return at the central location and wherein step (c) includes verifying that the number of objects remaining in the container upon return corresponds to the number of objects

expected to be remaining after removal of the predetermined number of objects.

11. The improvement of claim 1 and further comprising the steps of extracting information about the object in the security container at the time the container is dispensed from the central location and storing the information thus extracted and wherein step (c) includes comparing the information extracted upon return of the security container and its contained object to the stored information extracted at the time the container was dispensed.

12. The improvement of claim 1 and wherein step (b) includes taking a digital image of the object within the security container and extracting information about the object from the digital image and wherein step (c) includes comparing the information extracted from the digital image to expected information about the object.

13. The improvement of claim 12 and wherein the information extracted from the digital image includes the shape of the object.

14. The improvement of claim 12 and wherein the information extracted from the digital image includes the color of the object.

54

15. An automated object tracking and control system for dispensing objects to authorized users for use and receiving the objects from the users and storing them following use, said object tracking and control system comprising:

a storage unit configured to dispense, receive, and store a plurality of objects;

a control computer including a user interface, said control computer coupled to said storage unit for controlling the dispensing, receipt, and storage of objects by the storage unit;

means in said storage unit for extracting predetermined information about objects as objects are dispensed from and returned to the storage unit by users and for conveying the extracted information to said control computer;

said control computer being programmed to determine if the extracted information about the objects corresponds to expected information about the objects and, based on said comparison, to identify the objects and verify that they are the objects that they are expected to be;

said control computer being further programmed to take appropriate remedial action if an object is determined not to be what it is expected to be.

16. An object tracking and control system as claimed in claim 15 and wherein said means for extracting information

includes a scale in said storage unit for weighing objects as they are dispensed and returned, the extracted predetermined information including the weight of the objects.

17. An object tracking and control system as claimed in claim 16 and wherein said means for extracting information includes an imaging device for imaging objects as they are dispensed and returned and wherein said control computer is programmed to extract predetermined information about the objects from the object images.

18. An object tracking and control system as claimed in claim 17 and wherein the information extracted from the image includes the shape of the object.

19. An object tracking and control system as claimed in claim 17 and wherein the information extracted from the image includes the color of the object.

20. An object tracking and control system as claimed in claim 15 and wherein the objects are contained within respective security containers bearing readable identification codes and wherein said system further comprises means in said storage unit for reading the identification codes of security containers as

56

objects are dispensed and returned in said security containers to identify each security container.

21. An object tracking and control system as claimed in claim 20 and wherein said means for extracting information includes a scale in said storage unit for weighing security containers and object therein as objects in said security containers are dispensed and returned, the extracted predetermined information including the weight of the object and their containers.

22. An object tracking and control system as claimed in claim 21 and wherein said means for extracting information includes an imaging device in said storage unit for imaging objects inside their respective security containers as said security containers and their contained objects are dispensed and returned and wherein said control computer is programmed to extract predetermined information about the objects from the object images.

23. An object tracking and control system as claimed in claim 22 and wherein the information extracted from the image includes the shape of the object.

57

24. An object tracking and control system as claimed in claim 22 and wherein the information extracted from the image includes the color of the object.

25. A method of dispensing, tracking, and controlling use of units of narcotics through an automated, computer controlled storage, tracking, control, and dispensing system, said method comprising the steps of:

(a) providing a plurality of security containers, each security container for containing a plurality of units of a narcotic;

(b) receiving a request from a user via the control computer for a desired number of units of a narcotic stored in the system;

(c) verifying that the user is authorized to received the requested narcotic and taking remedial action if the user is not so authorized;

(d) if the user is authorized, identifying the security container that contains the requested narcotic and retrieving the container from a storage location in the system;

(e) extracting predetermined information about the narcotic in the security container and storing the extracted information;

(f) dispensing the security container to the user;

58

(g) receiving the security container from the user after the user has removed units of the narcotic from the security container;

(h) extracting predetermined information about the narcotic remaining in the received security container;

(i) comparing the information extracted in step (h) to the information stored in step and verifying based upon the comparison that the narcotic remaining in the received security container is what is expected to be;

(j) taking remedial action if, in step (i) the narcotic remaining in the security container is not what it is expected to be; and

(k) if the narcotic in the security container is verified to be what it is expected to be in step (i), storing the security container until the narcotic is requested again by an authorized user.

26. The method of claim 25 and wherein step (e) includes weighing the requested security container and its contents, the extracted information including the resulting weight, step (h) includes weighing the returned security container, and step (i) includes comparing the weight of the returned security container with the stored weight of the dispensed security container and determining that the weight of the returned security container is

59

what it is expected to be after removal of the requested units of the narcotic.

27.   The method of claim 25 and wherein step (e) includes taking an image of the contents of the requested security container and extracting predetermined information about the narcotic in the security container from the image.

28.   The method of claim 27 and wherein the information extracted from the image includes the number of units of narcotic in the security container, step (h) includes taking an image of the contents of the returned security container and extracting the number of units of narcotic remaining in the security container from the image, and step (i) includes comparing number of units of narcotic in the returned security container with the stored number of units of narcotic in the dispensed security container and determining that the number of units in the returned security container is what it is expected to be after removal of the requested number of units of the narcotic.

29.   The method of claim 27 and wherein the information extracted from the image includes the shape of narcotic in the security container, step (h) includes taking an image of the contents of the returned security container and extracting the shape of narcotics remaining in the security container from the

60

image, and step (i) includes comparing shape of units of narcotic in the returned security container with the stored shape of the units of narcotic in the dispensed security container and determining that the shape of the units of narcotic in the returned security container is what it is expected to be.

30.   The method of claim 27 and wherein the information extracted from the image includes the color of the narcotic in the security container, step (h) includes taking an image of the contents of the returned security container and extracting the color of narcotics remaining in the security container from the image, and step (i) includes comparing color of units of narcotic in the returned security container with the stored color of the units of narcotic in the dispensed security container and determining that the color of the units of narcotic in the returned security container is what it is expected to be.

61